ENDF/B-VII.1 U-238 Principal cross sections

Cross section (barns) vs. Energy (MeV)

- Total
- Absorption
- Elastic
- Gamma production
ENDF/B-VII.1 U-238
resonance total cross section

Energy (MeV)

Cross section (barns)

10^{-6} 10^{-5} 10^{-4} 10^{-3} 10^{-2} 10^{-1}

100 1000 10000

total
ENDF/B-VII.1 U-238
resonance total cross section

Energy (MeV)

Cross section (barns)

10^{-5} 10^{-4}
ENDF/B-VII.1 U-238
resonance total cross section

Energy (MeV)

Cross section (barns)

total
ENDF/B-VII.1 U-238 resonance total cross section

Cross section (barns)

Energy (MeV)
ENDF/B-VII.1 U-238
resonance total cross section

Cross section (barns)

Energy (MeV)
ENDF/B-VII.1 U-238
resonance total cross section

Cross section (barns)

Energy (MeV)
ENDF/B-VII.1 U-238 resonance absorption cross sections

![Graph of ENDF/B-VII.1 U-238 resonance absorption cross sections showing energy in MeV on the x-axis and cross section in barns on the y-axis. The graph features lines for capture and fission processes.](image_url)
ENDF/B-VII.1 U-238
resonance absorption cross sections

Energy (MeV)

Cross section (barns)

- capture
- fission
ENDF/B-VII.1 U-238
resonance absorption cross sections

Energy (MeV)

Cross section (barns)

capture
fission
ENDF/B-VII.1 U-238
resonance absorption cross sections

Cross section (barns)

Energy (MeV)

Capture
Fission
ENDF/B-VII.1 U-238
resonance absorption cross sections
ENDF/B-VII.1 U-238
resonance absorption cross sections

Energy (MeV)

Cross section (barns)

Capture
Fission
ENDF/B-VII.1 U-238
resonance absorption cross sections

Energy (MeV)

Cross section (barns)

capture
fission
ENDF/B-VII.1 U-238
UR total cross section

Cross section (barns)

Energy (MeV)
ENDF/B-VII.1 U-238
UR elastic cross section

Energy (MeV) vs. Cross section (barns)

- Inf. Dil.
- 100 b
- 1 b
ENDF/B-VII.1 U-238
UR capture cross section

Energy (MeV)

Cross section (barns)

- Inf. Dil.
- 100 b
- 1 b
ENDF/B-VII.1 U-238 Heating

Energy (MeV) vs. Heating (MeV/reaction)
ENDF/B-VII.1 U-238
Non-threshold reactions
ENDF/B-VII.1 U-238
Principal cross sections
ENDF/B-VII.1 U-238 Heating

Energy (MeV) vs. Heating (MeV/reaction) graph

- Heating scale: 0 to 50
- Energy scale: 0 to 30 MeV

Graph shows a general trend of increasing heating with energy, with a few fluctuations.
ENDF/B-VII.1 U-238 Damage

Damage (MeV-barns) vs. Energy (MeV)

- Energy (MeV) range: 0 to 30
- Damage (MeV-barns) range: 0 to 350
- The graph shows a linear increase in damage with energy.
ENDF/B-VII.1 U-238
Non-threshold reactions

Energy (MeV)

Cross section (barns)

- fission
- (n,gma)
ENDF/B-VII.1 U-238
Inelastic levels

Energy (MeV)

Cross section (barns)

(n,n*11)
(n,n*12)
(n,n*13)
(n,n*14)
(n,n*15)

Energy (MeV)
ENDF/B-VII.1 U-238
Inelastic levels

Energy (MeV)

Cross section (barns)

0 5 10 15 20 25 30

Energy (MeV)

0 10^{-3} 10^{-2} 10^{-1} 10^0 10^1 10^2 10^3

Cross section (barns)

(n,n*21) (n,n*22) (n,n*23) (n,n*24) (n,n*25)
ENDF/B-VII.1 U-238
Inelastic levels

Cross section (barns)

Energy (MeV)

- (n,n*26)
- (n,n*27)
- (n,n*28)
- (n,n*29)
- (n,n*30)
ENDF/B-VII.1 U-238
Inelastic levels

![Graph showing cross section (barns) vs. energy (MeV) for different inelastic levels: (n,n*36), (n,n*37), (n,n*38), (n,n*39), and (n,n*40). The graph has a logarithmic scale for both the y-axis (Cross section in barns) and the x-axis (Energy in MeV).]
ENDF/B-VII.1 U-238 angular distribution for elastic
ENDF/B-VII.1 U-238
Delayed nubar

Energy (MeV)

Delayed nubar

*10^{-3}

55

50

45

40

35

30

25

20

15.0

22.5

30.0

0.0

7.5
ENDF/B-VII.1 U-238
Delayed neutron spectra

- Group 1: frac 0.0139 decay/shake 1.363E-10
- Group 2: frac 0.1128 decay/shake 3.133E-10
- Group 3: frac 0.1310 decay/shake 1.233E-09
- Group 4: frac 0.3851 decay/shake 3.237E-09
- Group 5: frac 0.2540 decay/shake 9.060E-09
- Group 6: frac 0.1031 decay/shake 3.049E-08
ENDF/B-VII.1 U-238
Photon emission for fission

Prob/MeV vs. $E_y$ (MeV) vs. $E_n$ (MeV)

- $E_y$ (MeV) range: 0 to 30
- $E_n$ (MeV) range: 0 to 30
- Prob/MeV range: $10^{-4}$ to $10^{0}$
ENDF/B-VII.1 U-238
Photon emission for (n,gma)
ENDF/B-VII.1 U-238
Photon emission for nonelastic
ENDF/B-VII.1 U-238
thermal capture photon spectrum
ENDF/B-VII.1 U-238
14 MeV photon spectrum